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CENTRAL FAX CENTER**OCT 05 2006****FAX TRANSMISSION****DATE:** October 5, 2006**PTO IDENTIFIER:** Application Number 10/827,285-Conf. #2646
Patent Number**Inventor:** Te-Fu CHEN et al.**MESSAGE TO:** US Patent and Trademark Office**FAX NUMBER:** (571) 273-8300**FROM:** BIRCH, STEWART, KOLASCH & BIRCH, LLP

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PHONE: (703) 205-8026**Attorney Dkt. #:** 0941-0947PUS1**PAGES (Including Cover Sheet):** 17**CONTENTS:** Fax Cover Sheet (1 page)
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Appeal Brief (14 pages)

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Application No. (if known): 10/827,285

Attorney Docket No.: 0941-0947PUS1

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OCT 05 2006

Docket No.: 0941-0947PUS1
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Te-Fu CHEN et al.

Application No.: 10/827,285

Confirmation No.: 2646

Filed: April 20, 2004

Art Unit: 3745

For: FAN ASSEMBLY AND IMPELLER THEREOF

Examiner: D. J. Hanan

REPLY TO NOTICE OF NON-RESPONSIVE APPEAL BRIEF

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Responsive to the Notice of Non-Responsive Appeal Brief mailed on September 5, 2006, attached hereto is a corrected Appeal Brief in which claims 1 and 7 are now "mapped" to the specification and drawings, and in which each ground of rejection is argued under its own heading.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to our Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under § 1.17; particularly, extension of time fees.

Dated: October 5, 2006

Respectfully submitted,

By 

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Registration No.: 32,334

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Docket No.: 0941-0947PUS1
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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For: FAN ASSEMBLY AND IMPELLER THEREOF

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APPEAL BRIEF

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

As required under § 41.37(a), this brief is filed within two months of the Notice of Appeal filed in this case on June 14, 2006, and is in furtherance of said Notice of Appeal.

The fees required under § 41.20(b)(2) are dealt with in the accompanying Transmittal of Appeal Brief.

This brief contains items under the following headings as required by 37 C.F.R. § 41.37 and M.P.E.P. § 1206:

- | | |
|------------|---|
| I. | Real Party In Interest |
| II. | Related Appeals and Interferences |
| III. | Status of Claims |
| IV. | Status of Amendments |
| V. | Summary of Claimed Subject Matter |
| VI. | Grounds of Rejection to be Reviewed on Appeal |
| VII. | Argument |
| VIII. | Claims |
| IX. | Evidence |
| X. | Related Proceedings |
| Appendix A | Claims |

Birch, Stewart, Kolasch & Birch, LLP

KM/csm

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Application No.: 10/827,285

Docket No.: 0941-0947PUS1

I. REAL PARTY IN INTEREST

The real party in interest for this appeal is Delta Electronics Inc. as recorded on April 20, 2004 at reel 015236, frame 0892. No further Assignments of this application have been made.

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II. RELATED APPEALS, INTERFERENCES, AND JUDICIAL PROCEEDINGS

There are no other appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

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III. STATUS OF CLAIMS

A. Total Number of Claims in Application

There are 12 claims pending in application.

B. Current Status of Claims

1. Claims canceled: none
2. Claims withdrawn from consideration but not canceled: none
3. Claims pending: 1-12
4. Claims allowed: none yet
5. Claims rejected: 1-12

C. Claims On Appeal

The claims on appeal are claims 1-12

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IV. STATUS OF AMENDMENTS.

Applicant did not file an Amendment After Final Rejection. There are no unentered Amendments in this application.

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V. SUMMARY OF (Invention) CLAIMED SUBJECT MATTER**Claims 1-6**

Independent claim 1 is directed to an impeller 30 for a fan driven by a motor 35 (page 4, lines 18-21, Fig. 3A). The hub 32 accommodates the motor 35 therein (page 4, lines 21-22, Fig. 3A) and has an upper surface 321, a sidewall 322 and a center point C (page 5, lines 12-13, Fig. 3C). A plurality of blades 31 creates radial air flow and has bottom portions 31b directly arranged in a circle (page 4, lines 22-23, Figs. 3B-3C) on the upper surface or the side wall 322 with respect to the center point C (page 5, lines 14-17, Figs. 3B-3C), wherein no connecting structure is provided between the hub 32 and the blades 31 (page 5, lines 17-19, Fig. 3C).

Claims 7-12

Independent claim 7 is directed to a fan assembly 3, comprising a frame 36, a motor 35 disposed in the frame 36 (page 4, lines 18-19, Fig. 3A), a hub 32 disposed in the frame 36 (page 14, lines 20-21, Fig. 3A) and containing the motor 35 therein (pages 4, lines 21-22, Fig. 3A). The hub 32 has an upper surface 321, a side wall 322 and a center point C (page 5, lines 12-13, Fig. 3C). The hub 32 also has a plurality of blades 31 which create radial air flow and have bottom portions 31b directly arranged in a circle (page 4, lines 22-23, Figs. 3B-3C) on the upper surface 321 or the side wall 322 with respect to the center point C (page 5, lines 14-17, Figs. 3B-3C), wherein no connecting structure is provided between the hub 32 and the blades 31 (page 5, lines 17-19, Fig. 3C).

The notations of the figures and specification page above was done to comply with the Brief requirements of the U.S. Patent and Trademark Office and is not considered to be limiting the claims.

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VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-6, 6-10 and 12 are finally rejected under 35 U.S.C. § 102(b) by Nagai, U.S. Patent 4,647,271.

Claims 5 and 11 stand finally rejected under 35 U.S.C. § 103(a) as being unpatentable over Nagai et al.

Thus, all of the claims are finally rejected.

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VII. ARGUMENTS

Transmitted herewith is an Appeal Brief on behalf of the Appellants in connection with the above-identified application. This is an Appeal from the Final Office Action dated February 14, 2006 finally rejecting claims 1-12 in the above-identified application. The Appealed Claims 1-12 are set forth in attached Appendix.

Rejection under 35 USC 102(b)**Claim 1**

Regarding independent claim 1, the Examiner has relied upon the patent to Nagai et al. to disclose an impeller for a centrifugal blower. The Examiner seems to rely upon the embodiments from Figures 23-27. In these embodiments, an impeller 40 is provided with a hub 41. A hub plate 42 is also provided. On this hub plate a plurality of plates 43 and a shroud 44 are formed. While these elements are formed by injection molding, different components are provided. The blades in Nagai are mounted on the hub plate 42 and not the hub 41. Thus, this patent does not teach that the blades are directly disposed on the hub.

By avoiding an intermediate structure, a simpler impeller can be designed in the present invention. Also, such additional structures can interfere with the air flow as has been discussed in the specification of the present invention. By mounting the blades directly on the upper surface or the sidewall of the hub, the present invention can have a smooth efficient air flow. A motor and hub can be arranged such that they are in an out of the way position and will not interfere with air flow. Turbulence can be reduced while efficiency of the fan is maintained.

Claim 7

Independent claim 7 sets forth similar limitations to independent claim 1, and therefore the above-noted distinctions between independent claim 1 and Nagai also apply to independent claim 7.

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Rejection under 35 USC 103**Claim 5**

Regarding dependent claim 5, recognizing that the blades of Nagai either extend to or beyond the hub plate, the Examiner has alleged that it would be obvious to modify this arrangement to have the plates with an outer diameter less than that of the hub. However, there is no motivation for such a modification. Moreover, it should be noted that it is element 41 which is the hub in Nagai and the additional element of the hub plate 42 as provided. Thus, the blades all extend well beyond the hub 41. If they were made so closely spaced as to be on the small hub 41, then the efficiency of the fan would be hindered. On of ordinary skill in the art would not make this modification as proposed by the Examiner.

Claim 11

Dependent claim 11 sets forth similar limitations to dependent claim 5, and therefore the above-noted distinctions between claim 5 and Nagai also apply to independent claim 11.

Summary

In summary, it is believed that independent claims 1 and 7 as well as the dependent claims all set forth an impeller for a fan driven by a motor and a fan assembly which is neither suggested nor rendered obviousness by the prior art utilized by the Examiner. It is believed that the Appellant has counted all of the reasons given for the rejections of the appealed claims and thus, these rejections do not appear to be proper. Accordingly, it is respectfully requested that this Board reverse the final rejection of claims 1-12.

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VIII. CLAIMS

A copy of the claims involved in the present appeal is attached hereto as Appendix A.

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IX. EVIDENCE

No evidence pursuant to §§ 1.130, 1.131, or 1.132 or entered by or relied upon by the examiner is being submitted.

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X. RELATED PROCEEDINGS

No related proceedings are referenced in II. above, or copies of decisions in related proceedings are provided. Hence, no Appendix is included.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to our Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under § 1.17; particularly, extension of time fees.

Dated: October 5, 2006

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APPENDIX A

Claims Involved in the Appeal of Application Serial No. 10/827,285

1. (Previously Presented) An impeller for a fan driven by a motor, comprising:
a hub, accommodating the motor therein and having an upper surface, a sidewall and a center point; and
a plurality of blades creating radial air flow and having bottom portions directly arranged in a circle on the upper surface or the side wall with respect to the center point, wherein no connecting structure is provided between the hub and the blades.
2. (Original) The impeller as claimed in claim 1, wherein the blades are formed into an annular structure, having an outer diameter greater than that of the hub.
3. (Original) The impeller as claimed in claim 2, wherein the hub further has a sidewall, and the bottom portion of each blade has a portion extending downward along the sidewall.
4. (Original) The impeller as claimed in claim 1, wherein the blades are formed into an annular structure, having an outer diameter equal to that of the hub.
5. (Original) The impeller as claimed in claim 1, wherein the blades are formed into an annular structure, having an outer diameter less than that of the hub.
6. (Original) The impeller as claimed in claim 1, wherein the hub and the blades are integrally formed.
7. (Previously Presented) A fan assembly, comprising:
a frame;
a motor, disposed in the frame;

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a hub, disposed in the frame and containing the motor therein, having an upper surface, a sidewall and a center point; and

a plurality of blades, creating radial air flow and having bottom portions directly arranged in a circle on the upper surface or the side wall with respect to the center point, wherein no connecting structure is provided between the hub and the blades.

8. (Original) The fan assembly as claimed in claim 7, wherein the blades are formed into an annular structure, having an outer diameter greater than that of the hub.

9. (Original) The fan assembly as claimed in claim 8, wherein the hub further has a sidewall, and the bottom portion of each blade has a portion extending downward along the sidewall.

10. (Original) The fan assembly as claimed in claim 7, wherein the blades are formed into an annular structure, having an outer diameter equal to that of the hub.

11. (Original) The fan assembly as claimed in claim 7, wherein the blades are formed into an annular structure, having an outer diameter less than that of the hub.

12. (Original) The fan assembly as claimed in claim 7, wherein the hub and the blades are integrally formed.